

CLAIMS

What is claimed is:

1. A vacuum head devide configured to withdraw a fluid from a carpeted surface, the device comprising:

5 a) an elongated base plate configured to be movably disposed on the carpeted surface, and having a tapering cross section with a wider upper end and a narrower lower end configured to penetrate into the carpeted surface; and

b) at least one aperture, formed in the base plate, configured to withdraw the fluid under a vacuum force.

10 2. A device in accordance with claim 1, wherein the at least one aperture includes a plurality of apertures formed in an array in the base plate.

15 3. A device in accordance with claim 2, wherein the base plate has a lower surface; and wherein the plurality of apertures are formed at the lower end, and sized larger than a width of the lower surface, creating a plurality of protrusions extending from the base plate configured to penetrate the carpeted surface.

3. A device in accordance with claim 3, wherein the protrusions have a total surface area between the apertures less than a total area of the apertures.

5 4. A device in accordance with claim 3, wherein each of the protrusions have a width between the apertures less than a width of the apertures.

10 5. A device in accordance with claim 1, wherein the cross section of the base plate is V-shaped, and the lower end is rounded.

15 6. A device in accordance with claim 1, wherein the base plate includes a forward surface; and further comprising:

at least one channel, formed in the lower end of the base plate and extending from the forward surface to the at least one aperture.

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8. A vacuum head device configured to withdraw a fluid from a carpeted surface, the device comprising:

5 a) an elongated base plate configured to be movably disposed on the carpeted surface; and

b) a plurality of apertures, formed in an array in the base plate, configured to withdraw the fluid under a vacuum force.

10 9. A device in accordance with claim 8, wherein the base plate has a tapering cross section with a wider upper end and a narrower lower end configured to penetrate into the carpeted surface.

10 10. A device in accordance with claim 9, wherein the cross section of the base plate is V-shaped, and the lower end is rounded.

11 11. A device in accordance with claim 9, wherein the base plate has a lower surface; and wherein the plurality of apertures 20 are formed at the lower end, and sized larger than a width of the lower surface, creating a plurality of protrusions extending from the base plate configured to penetrate the carpeted surface.

13 12. A device in accordance with claim 11, wherein the protrusions have a total surface area between the apertures less than a total area of the apertures.

5 14 12 13. A device in accordance with claim 11, wherein each of the protrusions have a width between the apertures less than a width of the apertures.

10 15 14. A device in accordance with claim 8, wherein the base plate includes a forward surface; and further comprising:

a plurality of channels, formed in the lower end of the base plate and each extending from the forward surface to one of the plurality of apertures.

15. A vacuum head device configured to withdraw a fluid from a carpeted surface, the device comprising:

5 a) an elongated base plate configured to be movably disposed on the carpeted surface, and having a tapering cross section with a wider upper end and a narrower lower end configured to penetrate into the carpeted surface; and

b) a plurality of apertures, formed in an array in the base plate, configured to withdraw the fluid under a vacuum force.

16. A device in accordance with claim 15, wherein the plurality of apertures are formed at the lower end.

17. A device in accordance with claim 15, wherein the base plate has a lower surface; and wherein the plurality of apertures are formed at the lower end, and sized larger than a width of the lower surface, creating a plurality of protrusions extending from the base plate configured to penetrate the carpeted surface.

20 18. A device in accordance with claim 17, wherein the protrusions have a total surface area between the apertures less than a total area of the apertures.

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19. A device in accordance with claim 17, wherein each of the protrusions have a width between the apertures less than a width of the apertures.

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5 20. A device in accordance with claim 18, wherein the cross section of the base plate is V-shaped, and the lower end is rounded.

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10 21. A device in accordance with claim 15, wherein the base

plate includes a forward surface; and further comprising:

a plurality of channels, formed in the lower end of the base plate and each extending from the forward surface to one of the plurality of apertures.

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Page 24 of 25

24